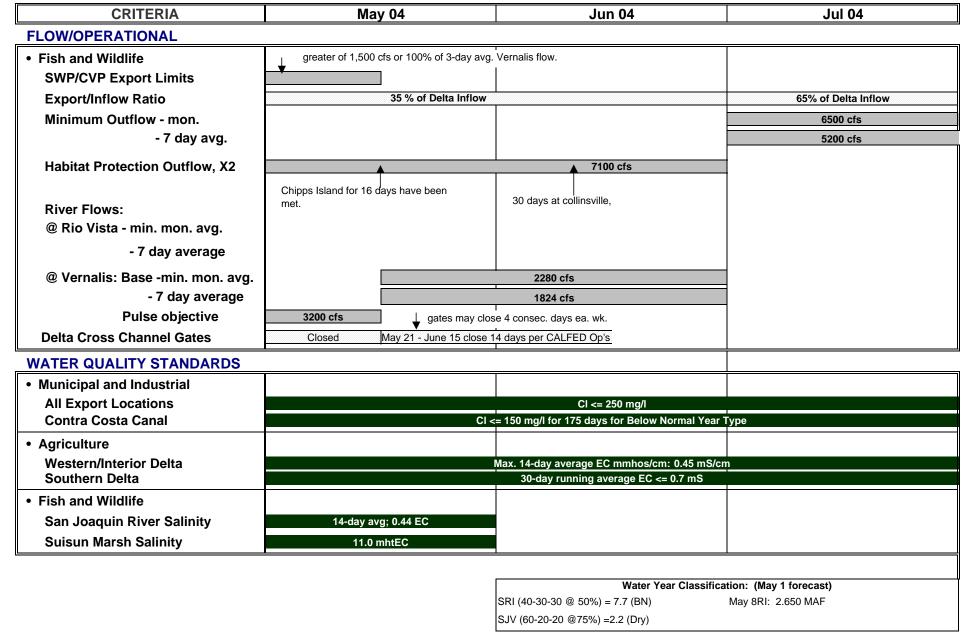


DRAFT

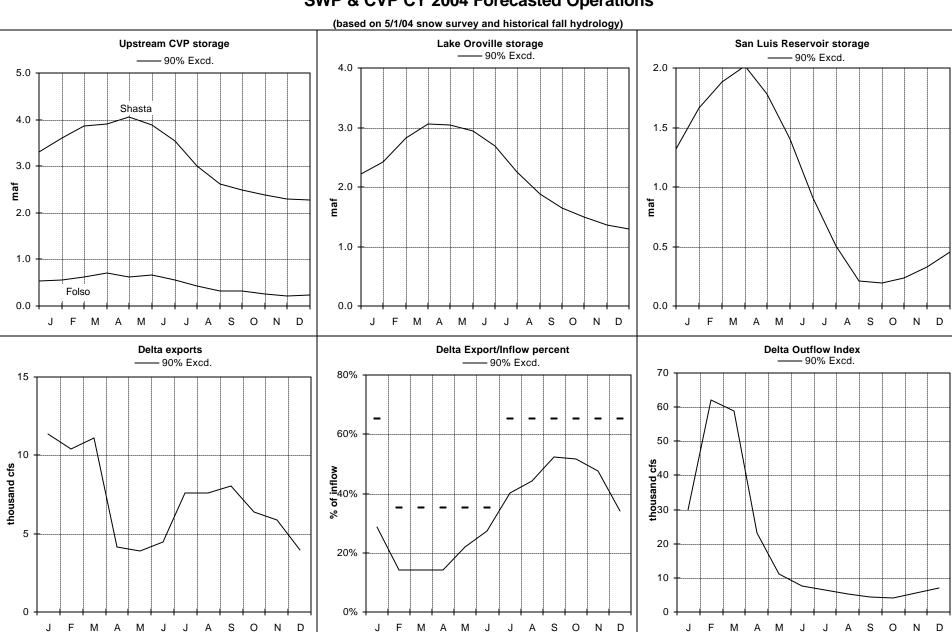
Bay-Delta Standards

DRAFT

Contained in D-1641



SWP & CVP CY 2004 Forecasted Operations



WY 2003/2004 EWA Accounting Summary

Based upon May Operations Study - 90% Exceedance Hydrology

						orage ((+ :	= Acanie	-					9 TAF				
	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Т
OD (Oroville) ⁰	0.398					-0.398 ³		·									
OD (YCWA/PCWA)										120 45	-50 ^{4 5}	-50 ^{4 5}	-20 ^{4 5}				
Carriage Water Loss ²											-10	-10	-4				T
OD (KCWA/SCVWD)									35 ⁶	-15 ⁶	-10 ⁶	-10 ⁶					1
OD (MWD)																	
															1		•
	•				FWA Ass	et Acquisi	tion in S\	VP San I	uis								
	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	T
/I Relaxation								·									1
WA share of SWP gain																	
roject Pumping to reduce EWA debt																	
POD using excess flows																	
POD using NOD storage																	
fer NOD - Sacramento River ²											4 4 5	4 4 5	16 ^{4 5}				
fer NOD - San Joaquin River 2																	
OD SWP Surface/GW Purchases										15 ⁶	10 ⁶	10 ⁶					
xchange of EWA assets																	
Groundwater pumping SOD																	
exchange from CVP to SWP in SL																	T
otal Monthly EWA Assets		0	0	0	0	0	0	0	0	15	14	14	16	0	0	0	
						et Acquis											
	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	T
/I Relaxation																	_
roject Pumping to reduce EWA debt							0.202										
POD using excess flows																	
POD using NOD storage											36 ^{4 5}	36 ^{4 5}					
fer NOD - Sacramento River 2																	
(fer NOD - San Joaquin River ²																	
SOD CVP Surface/GW purchases																	
Exchange of EWA assets																	
Groundwater pumping																	-
Exchange from SWP to CVP in SL Total Monthly EWA Assets	0	0	0	0	0	0	0	0	0	0	36	36	0	0	0	0	-
Otal Monthly EWA Assets		U	U	U	U	U	U	U	U	U	30	30	U	U	U	U	
					EWA Evn	enditures	at the Ev	nort Bur	nne								
	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Т
WP export cuts								-12 ⁷	-80 ⁷			Ŭ	· ·				
'								-12									╀
OVP export cuts Otal Expenditures	0	•		_	0		0	40	-71 ⁸	0	0	0	0	0	0	0	١.
otai Expenditures		0	0	0	U	0	U	-12	-152	U	U	U	U	U	U	U	
,				E1A/	F I	4 th- 1		M C	N					_	I Mai	Dec	Ιτ
	C/O	I Oct	Nov			Month Incr				Lun	Lut	Διια	San	Oct			1 1
	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun 15	Jul 14	Aug	Sep 16	Oct	Nov		1
SWP in SL (without Source Shift)	0.057	0	0	Dec 0	Jan 0	Feb 0	Mar 0	Apr -12	May -80	15	14	14	16	0	0	0	
SWP in SL (without Source Shift)	0.057 -0.202	0.000	0.000	0 0.000	Jan 0 0.000	0 0.000	0 0.202	Apr -12 0	-80 -71	15 0	14 36	14 36	16 0	0	0	0	
WP in SL (without Source Shift) VP in SL OD Storage	0.057 -0.202 0.398	0 0.000 0	0.000 0	0 0.000 0	Jan 0 0.000 0	0 0.000 -0.398	0 0.202 0	Apr -12 0 0	-80 -71	15 0 120	14 36 -50	14 36 -50	16 0 -20	0 0 0	0 0 0	0 0	
WP in SL (without Source Shift) VP in SL OD Storage OD Storage (non-S.L.)	0.057 -0.202 0.398 0.000	0 0.000 0	0.000	0 0.000 0	Jan 0 0.000	0 0.000	0 0.202	Apr -12 0	-80 -71	15 0 120 -15	14 36 -50 -10	14 36 -50 -10	16 0	0	0	0	
WP in SL (without Source Shift) VP in SL OD Storage OD Storage (non-S.L.)	0.057 -0.202 0.398	0 0.000 0	0 0.000 0 0	0 0.000 0	Jan 0 0.000 0	Feb 0 0.000 -0.398 0	Mar 0 0.202 0	Apr -12 0 0	-80 -71 0 35	15 0 120	14 36 -50	14 36 -50	16 0 -20 0	0 0 0	0 0 0	0 0 0	
EWP in SL (without Source Shift) EWP in SL IOD Storage EOD Storage (non-S.L.)	0.057 -0.202 0.398 0.000	0 0.000 0	0 0.000 0 0	0 0.000 0 0 0	Jan 0 0.000 0 0 0 0	Feb 0 0.000 -0.398 0	Mar 0 0.202 0 0	Apr -12 0 0 0 -12	-80 -71 0 35 -117	15 0 120 -15	14 36 -50 -10	14 36 -50 -10	16 0 -20 0	0 0 0	0 0 0	0 0 0	
EWP in SL (without Source Shift) EWP in SL IOD Storage EOD Storage (non-S.L.)	0.057 -0.202 0.398 0.000	0 0.000 0	0 0.000 0 0	0 0.000 0 0 0	Jan 0 0.000 0 0 0 0	0 0.000 -0.398 0 0	Mar 0 0.202 0 0	Apr -12 0 0 0 -12	-80 -71 0 35 -117	15 0 120 -15	14 36 -50 -10	14 36 -50 -10	16 0 -20 0	0 0 0	0 0 0	0 0 0	
WP in SL (without Source Shift) VP in SL IOD Storage OD Storage (non-S.L.) otal Incremental Storage Changes	0.057 -0.202 0.398 0.000 0.253	0 0.000 0 0	0 0.000 0 0	0 0.000 0 0 0 EWA	Jan 0 0.000 0 0 0 0 0	Feb 0 0.000 -0.398 0 0 onth Stora	Mar 0 0.202 0 0 0 0 0 ge Balan Mar	Apr -12 0 0 0 -12 ce at Vari	May -80 -71 0 35 -117	15 0 120 -15 120	14 36 -50 -10 -10	14 36 -50 -10	16 0 -20 0 -4	0 0 0 0 0	0 0 0 0	0 0 0 0 0	
WP in SL (without Source Shift) VP in SL OD Storage OD Storage (non-S.L.) otal Incremental Storage Changes WP in SL (without Source Shift)	0.057 -0.202 0.398 0.000 0.253	0 0.000 0 0 0	0 0.000 0 0 0	0 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Jan 0 0.000 0 0 0 0 End-of-Mo	Feb 0 0.000 -0.398 0 0 onth Stora	Mar 0 0.202 0 0 0	Apr -12 0 0 0 -12 ce at Vari	May -80 -71 0 35 -117 ous Sites May	15 0 120 -15 120 Jun	14 36 -50 -10	14 36 -50 -10 -10	16 0 -20 0 -4	0 0 0 0	0 0 0 0 0	0 0 0 0	
WP in SL (without Source Shift)	0.057 -0.202 0.398 0.000 0.253 C/O 0.057	0 0.000 0 0 0	0 0.000 0 0 0	Dec 0 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Jan 0 0.000 0 0 0 0 End-of-Mo Jan 0	Feb 0 0.000 -0.398 0 0 onth Stora Feb 0	Mar 0 0.202 0 0 0 0 ge Balan Mar 0	Apr -12 0 0 0 -12 ce at Vari Apr -12	May -80 -71 0 35 -117 ous Sites May -93	15 0 120 -15 120 Jun -78	14 36 -50 -10 -10 -10	14 36 -50 -10 -10 -49	16 0 -20 0 -4 Sep	0 0 0 0 0 0	0 0 0 0 0 0 Nov	0 0 0 0 0 0 Dec	
WP in SL (without Source Shift) VP in SL OD Storage OD Storage (non-S.L.) otal Incremental Storage Changes WP in SL (without Source Shift) VP SL	0.057 -0.202 0.398 0.000 0.253 C/O 0.057 -0.202	0 0.000 0 0 0 0	0 0.000 0 0 0 0 Nov 0 -0.202	Dec 0 0.000 0 0 0 EWA Dec 0 -0.202	Jan 0 0.000 0 0 0 End-of-Mo Jan 0 -0.202	Feb 0 0.000 -0.398 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar 0 0.202 0 0 0 0 ge Baland Mar 0 0	Apr -12 0 0 -12 ce at Vari Apr -12 0	May -80 -71 0 35 -117 ous Sites May -93 -71	15 0 120 -15 120 Jun -78 -71	14 36 -50 -10 -10 -10 -36	14 36 -50 -10 -10 -10 Aug -49	16 0 -20 0 -4 Sep -33 0	0 0 0 0 0 0 Oct -33	0 0 0 0 0 0 Nov	0 0 0 0 0 0	

650

650

Total Storage (base case)

MWD Source Shifting

Storage (with MWD source shifting)

Encroachment Total Storage (EWA case) 788

788 0

788

Dec

1010

1010

1010

C/O

1879

1878

1878

1665

1664

1664

2020

2020

2020

Apr

1781

1768

1768

May

1202

1202

824

675

675

424

325

24

349

Sep

149

116

-12

153

214

181

-12

205

Aug

142

93

25

142

403

369

369

Nov

286

253

-12

265

⁶⁵⁰ 2004 NOD Purchases = 65(YCWA) + 20(PCWA). YCWA has firm 65 taf; can exercise options for an additional 85 taf.

¹ Aqueduct conveyance and evaporation losses are not included.

² Carriage water loss applies to water transfers from the Sacramento River (assumed to be 20% until modeling results indicate otherwise);

a 10% conveyance loss applies to water transfers from the San Joaquin River. Carriage water loss in WY 2003 was 0%.

The SWP spilled \sim 400 af of EWA water stored in Oroville during flood control operations.

⁴ 2004 YCWA Transfer (Joint place of use) ⁵ 2004 PCWA Transfer (Joint place of use)

⁶ 2004 SOD Transfers - 35 TAF from KCWA (SWP place of use)

⁷The SWP cost for VAMP and its shoulders are estimated to be 33 TAF and 60 TAF, respectively (based upon the SWP April studies).

⁸ The CVP cost for "shoulders" on VAMP is estimated to be 71 TAF (based upon the CVP April B2 studies).

⁹ Based upon DWR's 90% (90% Fall) allocation study (dated 5/2004).